

Abstract

To provide an interconnecting power generation system which can detect an abnormality in the utility power supply and can be isolated from a utility power system and can prevent damage to a turbogenerator.

An interconnecting power generation system comprises: an interconnecting inverter 14; a voltage phase shift circuit 20 which synchronizes the output voltage phase of the interconnecting inverter 14 with the utility power voltage phase and monitors zero crossings of the utility power voltage, and which shifts the output voltage phase from the utility power voltage phase and shifts the shifted output voltage phase to the utility power voltage phase; a phase comparator 24 for comparing the voltage phase of the utility power system 10 and the output voltage phase of the interconnecting inverter; and an interconnection control unit 30 which detects a power outage caused by an interruption of power supply from the utility power system 10 based on a series of a predetermined number of matching signals outputted from the phase comparator 24 and sends a control signal to a circuit breaker 22 to shut off the output of the interconnecting inverter 14 from the utility power system 10.